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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 28117-2026

Replacing GB/T 28117-2011

**General quality rules of multi-layer co-extrusion films and
pouches for food packaging**

食品包装用多层共挤膜、袋质量通则

(English Translation)

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Table of Contents

Foreword
1 Scope
2 Normative references

Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document specifies the technical requirements related to product quality. Food safety requirements can be found in relevant laws, regulations, policies, and food safety standards.

document.

This document replaces GB/T 28117-2011 "Multilayer Co-extruded Films and Bags for Food Packaging". Compared with GB/T 28117-2011, except for the structure...

Aside from adjustments and editorial changes, the main technical changes are as follows.

- a) The scope has been changed (see Chapter 1, Chapter 1 of the 2011 edition);
- b) Added terms and definitions for polyolefins (see 3.2);
- c) The definitions of lap seal and butt seal have been deleted (see 3.1.2 and 3.1.3 in the 2011 version);
- e) Product classifications have been changed (see Chapter 5, Chapter 4 of the 2011 edition);
- f) Printing requirements and corresponding test methods have been added (see 6.3, 7.5);
- g) The membrane length and width tolerances were modified (see Table 3, 2011 edition);
- h) Increased requirements for bag thickness and tolerance (see 6.4.3);
- i) The thickness range has been changed (see Table 5, 2011 edition);
- j) The bag length range has been changed (see Table 6, 2011 edition);
- k) The peel strength and haze indices have been changed, and the transmittance item and index have been added (see Table 7, Table 7 in the 2011 edition);

l) The oxygen barrier performance indicators have been changed (see Table 9, Table 8 in the 2011 edition);

m) A test method for light transmittance has been added (see 7.7.6);

n) Added requirements for solvent residue and corresponding test methods (see 6.6, 7.8);

o) The sampling method has been changed (see 8.2.1, 7.3.1 in the 2011 edition).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China National Light Industry Council.

This document is under the jurisdiction of the National Technical Committee on Standardization of Food Direct Contact Materials and Products (SAC/TC397).

1 Scope

This document specifies the technical requirements, inspection rules, marking, packaging, and transportation of multilayer co-extruded films and bags (hereinafter referred to as "films and bags") for food packaging.

The requirements for transportation and storage are given, product classification is provided, and corresponding test methods are described.

This document applies to the production, inspection, and sale of food packaging films and bags produced by multi-layer melt co-extrusion process.

This document does not apply to multilayer co-extruded heat shrink films and bags.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

GB/T 191 Pictorial Symbols for Packaging and Storage GB/T 1037-2021 Determination of Water Vapor Permeability of Plastic Films and Sheets - Cup Method (Gain and Loss Method) GB/T 1038.1 Test methods for gas permeability of plastic films and sheets - Part 1: Differential pressure method GB/T 1040.3 Determination of tensile properties of plastics - Part 3: Test conditions for films and sheets GB/T 2410 Determination of light transmittance and haze of transparent plastics GB/T 2828.1-2012 Sampling Procedures for Inspection by Attributes - Part 1: Lot-by-lot Inspection Sampling Indexed by Acceptable Quality Limit (AQL) plan GB/T 2918-2018 Standard Environment for Conditioning and Testing of Plastic Specimens GB/T 6672 Mechanical Measurement Method for Determination of Thickness of

Plastic Films and Sheets GB/T 6673 Determination of length and width of plastic films and sheets GB/T 7705 Lithographic decorative printing GB/T 7707 Gravure Decorative Printing GB/T 8808 Peel Test Method for Flexible Composite Plastic Materials GB/T 9639.1-2008 Test methods for impact resistance of plastic films and sheets - Free-fall dart method - Part 1: Stepwise method GB 12904 Retail Commodity Barcode Coding and Barcode Representation GB/T 14257 Guidelines for the Placement of Barcode Symbols on Commodity Barcodes GB/T 14258 Information Technology - Automatic Identification and Data Acquisition Technology - Inspection of Barcode Symbol Printing Quality GB/T 17497.2 Flexographic decorative printing - Part 2: Plastics and metal foils GB/T 18348 Inspection of the printing quality of barcode symbols for commodity barcodes GB/T 21302 General Rules for Composite Films and Bags for Packaging GB/T 26253 Determination of water vapor transmission rate of plastic films and sheets using infrared detector method GB/T 33259 Quality Requirements and Inspection Methods for Digital Printing QB/T 1130 Test Method for Right-Angle Tear Resistance of Plastics QB/T 2358 Test method for heat seal strength of plastic film packaging bags